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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,997	01/04/2002	Michael Becker	MEL 201	4611

7590 09/22/2003

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Warren, NJ 07059

EXAMINER

MATHEWS, ALAN A

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 09/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,997

Applicant(s)

BECKER ET AL.

Examiner

Alan A. Mathews

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9/302002.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to in that the term “the edge tilt angle” has no proper antecedent basis in the claim, since the expression “edge” was not previously used in the parent claim. Claim 4 is objected to in that the terms “the transparent electrodes” and “the cell glasses” do not have proper antecedent bases in the claim.

Claim Rejections - 35 USC § 112

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 1, “Method for determining of parameters” is indefinite, and should apparently be “Method for determining parameters”. In claim 1, lines 2-4, “such as in particular of the tilt angle of the liquid crystal molecules in the cell” and “possibly also the liquid crystal layer thickness of the liquid crystal molecules” are indefinite, since it is not clear whether the tilt angle and the layer thickness are being claimed or not. In claim 1, lines 4-7 “a measured transmission course measured depending on a varying angle or irradiation without considering possible symmetry properties of this course” is indefinite. First, how does the term “transmission course” correlated with the “curve of the transmission” recited on line 6 of claim 1, and how does “transmission course” correlate with the “transmission curve” recited on lines 2

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and 4 of claim 2. Does “transmission course” and “transmission curve” mean the same thing, or do they mean different things. Subsequent use of the term “transmission course” is indefinite unless the correlation with or distinction from “transmission curve” is clarified. Secondly, it is not clear what is meant by “without considering possible symmetry properties of this course”. In claim 1, lines 8 – 10, “wherein also modulation effects based on multiple reflections are taken into consideration in addition to birefringence effects in the liquid crystal layer of the cell” is indefinite. What does “are taken into consideration” mean. How are they “taken into consideration”? What are the functional relationships? In claim 1, line 15 and 16, “as in particular the tilt angle and possibly also the layer thickness” is indefinite, since it is not clear whether the tilt angle and the layer thickness are positively recited elements in the claim. In claim 2, line 3 “and if required then additionally ---layer of the cell” is indefinite. The expression “if required then additional” is an indefinite alternative expression. Furthermore, this would appear to contradict line 2 of claim 2, which states “transmission curve modulated **only** by effects of the birefringence in the liquid crystal layer of the cell”. In claim 4, lines 3-4 “and if required the thickness and the index or refraction ---“ is also indefinite for similar reasons in that “if required” is an alternative recitation, and it is not clear whether thickness and the index of refraction are entered as parameters or not. In claim 4, line 2, “one side of lens” should apparently be “one side of a lens”. It is noted that the claims are replete with indefinitenesses not pointed out in this paragraph, and Applicant should carefully review the claims to correct these indefinitenesses including making sure that all terms in the claims have proper antecedent basis in the claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al. (U. S. Patent No. 5,728,318). Yamashita et al. is the U. S. equivalent to EP 0711818 cited on Applicant's PTO-1449 and cited on the PCT Preliminary Examination Report). Yamashita et al. discloses in column 19, lines 50-67, and column 30, lines 1-29, determining the tilt angle of a liquid crystal cell and also cell thickness and refractions N_e and N_o . Yamashita et al. further discloses in column 30, lines 9-12, "A pretilt angle α was obtained through a simulation wherein a fitting of a spectrum of the intensity of the transmitted light formed by interference was effected with respect to the following theoretical curve (a) and relationship (b)". It is noted that Column 29, lines 50-52, makes reference to the document "Jpn. J. Appl. Phys. Volume 19 (1980), Number 10, Short Notes 2013". It is further noted that the claims are indefinite as recited in paragraph 2, making it difficult to determine what is positively being claimed and what is not positively claimed.

Conclusion

5. Claims 5-11 are to value to make a determination of patentability.

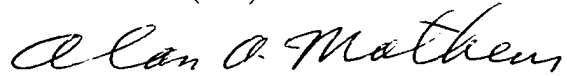
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Yamada et al. (U. S. Patent No. 5,458,804) is cited to show the U. S. equivalent to EP 0571955 cited on Applicant's PTO-1449). The patent to Brosig (U. S. Patent No. 5,172,187) is cited to show the U. S. equivalent to DE 4011116 cited on Applicant's PTO-1449. The patent to Kawagishi et al. is cited to show the U. S. equivalent to EP 0349006 cited on Applicant's PTO-1449. The patents on Applicant's PTO 1449 are cited for the same reasons Applicant cited them in his INFORMATION DISCLOSURE STATEMENT.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (703) 308-1706. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in cursive script, reading "Alan A. Mathews".

Alan A. Mathews
Primary Examiner
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AM